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WHAT IS CLAIMED IS

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1. A reflection-type liquid crystal display device, comprising:

a first substrate;

10 a second substrate disposed so as to face said first substrate, said second substrate carrying projections and depressions thereon;

a reflective electrode provided on said second substrate so as to cover said projections and depressions in electrical contact with a switching  
15 device provided on said second substrate via a contact hole; and

a liquid crystal layer provided between said first and second substrates, said liquid crystal layer having a negative dielectric anisotropy,

20 wherein said contact hole is disposed centrally to said reflection electrode, and

wherein a structure controlling alignment of liquid crystal molecules in said liquid crystal layer is disposed so as to overlap said contact hole when  
25 said second substrate is viewed in a direction perpendicular thereto.

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2. A reflection-type liquid crystal display device as claimed in claim 1, wherein said structure is provided on said reflection electrode.

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3. A reflection-type liquid crystal display device as claimed in claim 1, wherein said structure is provided on a surface of said first substrate facing said second substrate.

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4. A reflection-type liquid crystal display device as claimed in claim 1, wherein said structure has a size generally equal to a size of said contact hole when viewed in a direction perpendicular to said second substrate.

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5. A reflection-type liquid crystal display device as claimed in claim 1, wherein said structure has a height corresponding to a step height formed in said reflection electrode by said contact hole.

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6. A method of fabricating a reflection-type liquid crystal display device comprising a first substrate, a second substrate provided so as to face said first substrate, said second substrate carrying thereon projections and depressions having a reflectivity, a liquid crystal layer having a negative dielectric anisotropy provided between said first and second substrates, and an optically polymerized polymer structure provided between said first and second substrates, said method comprising the steps of:

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causing optical polymerization of a compound

constituting said polymer structure by irradiating light perpendicularly to said second substrate and causing reflection of said light by said projections and depressions in an in-plane direction of said  
5 second substrate;

    said step of causing optical polymerization is conducted by providing an in-plane directivity to the light reflected by said projections and depressions by a optimizing a shape of said  
10 projections and depressions, such that said optical polymerization is conducted in a direction corresponding to said in-plane directivity.

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7. A reflection-type liquid crystal display device, comprising:

    a first substrate;  
20     a second substrate disposed so as to face said first substrate;  
    a liquid crystal layer having a negative dielectric anisotropy disposed between said first and second substrates; and  
25     a vertical alignment film formed on a surface of said first substrate and a surface of said second substrate;

    wherein said alignment film contains a vertical alignment component with a proportion of 25%  
30 or more with regard to total diamine components.

35     8. A reflection-type liquid crystal display device, comprising:

    a first substrate;

a second substrate disposed so as to face said second substrate, said second substrate carrying thereon projections and depressions having a reflectivity;

5 a liquid crystal layer having a negative dielectric anisotropy disposed between said first and second substrates; and

a polarizer disposed at an outer side of said first substrate such that an absorption axis of said polarizer extends generally parallel to a  
10 direction in which a reflection intensity caused by said projections and depressions becomes maximum.

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9. A reflection-type liquid crystal display device, comprising:

a first substrate;

20 a second substrate disposed so as to face said first substrate, said second substrate carrying projections and depressions having a reflectivity;

a liquid crystal layer having any of positive or negative dielectric anisotropy provided  
25 between said first and second substrates; and

a polarizer disposed at an outer side of said first substrate,

an optical phase compensation film disposed between said first substrate and said polarizer, said  
30 optical phase compensation film having a negative dielectric anisotropy in a direction perpendicular to a plane of said first substrate,

said optical phase compensation film having a retardation  $df\{(n_x+n_y)/2-n_z\}$  so as to satisfy the  
35 relationship

$$0.4 \leq [df\{(n_x+n_y)/2-n_z\}]/(dlc \Delta n) \leq 0.7,$$

wherein  $n_x$ ,  $n_y$  and  $n_z$  are refractive indices of said

optical phase compensation film respectively in an x-direction, a y-direction and a z-direction,  $d_{lc}$  is the thickness of said liquid crystal layer, and  $\Delta n$  is a refractive index difference between an extraordinary ray and an ordinary ray in the liquid crystal layer.

10            10. A reflection-type liquid crystal display device as claimed in claim 9, wherein said optical phase compensation film has a retardation axis in a direction parallel to said first substrate.

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11. A reflection-type liquid crystal display device as claimed in claim 9, further comprising,  
20 between said polarizer and said optical phase compensation film, another optical phase compensation film having a positive dielectric anisotropy in the direction parallel to a plane of said first substrate, said another optical phase compensation film having a  
25 retardation of about  $1/4$  of the wavelength of visible light..

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12. A reflection-type liquid crystal display device as claimed in claim 11, wherein said optical phase compensation film and said another optical phase compensation film have a retardation axis in a  
35 direction parallel to said first substrate.

13. A reflection-type liquid crystal display

device as claimed in claim 12, wherein said optical phase compensation film and said another optical phase compensation film have respective retardations such that a sum of said retardation of said optical phase compensation film and said retardation of said another optical phase compensation film is equal to about  $1/4$  of the wavelength of visible light.

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14. A reflection-transmission-type liquid crystal display device, comprising:

a first substrate;  
15 a second substrate provided so as to face said first substrate;

a transparent electrode provided on a surface of said first substrate facing said second substrate;

20 a reflection electrode provided on a surface of said second substrate facing said first substrate, said reflection electrode having an opening;

a scattering layer provided between said first and second substrates, said scattering layer including therein a liquid crystal layer and changing an optical state thereof between a scattering state and a non-scattering state; and

25 a pair of polarizers disposed at outer sides of a liquid crystal panel formed by said first substrate, said second substrate and said scattering layer,

30 at least one of said polarizers is formed of a circular polarizer.

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15. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein each of said pair of polarizers is formed of a circular polarizer.

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16. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein one of said pair of polarizers is a linear polarizer.

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17. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein said scattering layer has a retardation of  $(0.5n + 1/4)\lambda$ , where  $\lambda$  is the wavelength of visible light and  $n$  is a natural number in said non-scattering state thereof

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18. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein said scattering layer has an in-plane retardation in said non-scattering state thereof such that said in-plane retardation is smaller than a product  $\Delta n \cdot d$ , where  $\Delta n$  is the birefringence of a liquid crystal layer constituting said scattering layer and  $d$  is the thickness of said liquid crystal layer.

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19. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein said reflection electrode has a slit shape.

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20. A reflection-transmission-type liquid crystal display device as claimed in claim 14, wherein  
10 any of said first and second substrates carries a color filter, said color filter having a reflection region corresponding to said reflection electrode and a transmission region corresponding to said  
transmission region, said color filter having  
15 different color purities in said reflection region and in said transmission region.

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21. A reflection-transmission-type liquid crystal display device as claimed in claim 20, wherein said color filter is provided on said reflection electrode.

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